

ABSTRACT

A surface-micromachined high-pressure sensor, formed by forming a cavity using a sacrificial layer. The sacrificial layer can be reflowed to make the edges of the cavity more rounded. The material that is used for the diaphragm can be silicon nitride, or multiple layers including silicon nitride and other materials. The pressure sensor is intended to be used in high pressure applications, e.g. pressure is higher than 6000, 10,000 or 30,000 P.S.I.